COLORADO DISCHARGE PERMIT SYSTEM (CDPS)
FACT SHEET FOR PERMIT NUMBER CO0020737
SOUTH FORT. COLLINS SANITATION DISTRICT
WATER RECLAMATION FACILITY
LARIMER COUNTY

TABLE OF CONTENTS

I. TYPE OF PERMIT

A. Permit Type: Domestic - Major Municipal, Mechanical Plant, Sixth Renewal

B. Discharge To: Surface Water

II. FACILITY INFORMATION

A. SIC Code: 4952 Sewerage Systems

B. Facility Classification: Class B per Section 100.5.2 of the Water and Wastewater Facility Operator Certification Requirements

A. **C. Facility Location**: SW 1/4 of Section 17, T6N, R68W. 2560 East County Road 32, Fort Collins, CO 80528, at 40.48397° N, 105.03101° W.

D. Permitted Feature: 001A, from 001A following disinfection and prior to mixing with the receiving stream. 40.° 29’ 12.3” N, 105° 1’ 31.8”W. The location provided above will serve as the point of compliance for this permit and are appropriate as they are located after all treatment and prior to discharge to the receiving water.

E. Facility Flows: 4.5 MGD

F. Major Changes From Last Renewal:
Since the last amendment to the fifth renewal of this permit, there have been additions to the preliminary treatment of the WWTF. This was done through the amended site application ES12.44320. Dual mechanical bar screens, dual vortex grit removal systems, and an enhanced influent pump station have been added to the WWTF. Another centrifuge has also been added to the WWTF to provide redundancy to the biosolids dewatering system.

III. RECEIVING STREAM

A. Waterbody Identification: *COSPCP22, Fossil Creek Reservoir*

B. Water Quality Assessment:

An assessment of the stream standards, low flow data, and ambient stream data has been performed to determine the assimilative capacities for *Fossil Creek Reservoir* for potential pollutants of concern. This information, which is contained in the Water Quality Assessment (WQA) for this receiving stream(s), also includes an antidegradation review, where appropriate. The Division's Permits Section has reviewed the assimilative capacities to determine the appropriate water quality-based effluent limitations as well as potential limits based on the antidegradation evaluation, where applicable. The limitations based on the assessment and other evaluations conducted as part of this fact sheet can be found in Part I.A of the permit.

Permitted Feature *001A* will continue to be the authorized discharge point to Fossil Creek Reservoir.

IV. FACILITY DESCRIPTION

A. Infiltration/Inflow (I/I)
Infiltration/inflow problems have been documented during storm events in the service area of the WWTF in the past, and the facility will continue to address these issues with regular inspection and maintenance.

B. Lift Stations
Table IV-1 summarizes the information provided in the renewal application for the lift stations in the service area.

Table IV-1 – Lift Station Summary

Station Name/#	Firm Pump Capacity (gpm)	Peak Flows (gpd)	% Capacity (based on peak flow)
New Boyd Lake #4	*2 pumps – 5hp, 175 gpm*	8,000	3
Old Boyd Lake #1	*2 pumps – 5 hp – 255 gpm*	6,000	2
Crossroads #2	*2 pumps – 7.5 hp – 180 gpm*	66,000	26
Ptarmigan #5	*3 pumps – 115 hp – 612 gpm*	316,000	36
Highland Meadows #6	*3 pumps – 50 hp – 600 gpm*	37,000	5

C. Chemical Usage

The permittee stated in the application that they utilize three chemicals in their treatment process. The MSDS sheets have been reviewed and the following chemicals have been approved for use and are summarized in the following table.

Table IV-2 – Chemical Additives

Chemical Name	Purpose	Constituents of Concern
Calcium Hypochlorite	Disinfection	Chlorine
Chlorine	Disinfection	Chlorine
Clarifloc C-6266 Polymer	Flocculation	None

Chemicals deemed acceptable for use in waters that will or may be discharged to waters of the State are acceptable only when used in accordance with all state and federal regulations, and in strict accordance with the manufacturer's site-specific instructions. There were also three herbicides the permittee submitted in their list of chemicals (Weedar, Banvel, and Roundup), and it is the Division's understanding that these chemicals are not used in the wastewater treatment process. These herbicides should only be used according to manufacturer label directions to control weeds at the WWTF site and never applied to the waters in or around the WWTF.

D. Treatment Facility, Facility Modifications and Capacities

The facility consists of one oxidation ditch with three concentric basins, two secondary clarifiers, a final filtration system consisting of two disk filtration units, and ultraviolet disinfection. The permittee has not performed any construction at this facility that would change the hydraulic capacity of 4.5 MGD or the organic capacity of 12,800 lbs BOD_5/day, which were specified in Site Approval 4847. That document should be referred to for any additional information.

Pursuant to Section 100.5.2 of the Water and Wastewater Facility Operator Certification Requirements, this facility will require a Class A certified operator.

E. Biosolids Treatment and Disposal

Biosolids are treated in an aerobic digester. Liquid is removed in a centrifuge, then the biosolids are trucked offsite for disposal.

1. EPA General Permit

   EPA Region 8 issued a General Permit (effective October 19, 2007) for Colorado facilities whose operations generate, treat, and/or use/dispose of sewage sludge by means of land application, landfill, and surface disposal under the National Pollutant Discharge Elimination System. All Colorado facilities are required to apply for and to obtain coverage under the EPA General Permit.

2. Biosolids Regulation (Regulation No. 64, Colorado Water Quality Control Commission)

While the EPA is now the issuing agency for biosolids permits, Colorado facilities that land apply biosolids must comply with requirements of Regulation No. 64, such as the submission of annual reports as discussed later in this rationale.

V. PERFORMANCE HISTORY

A. Monitoring Data

1. Discharge Monitoring Reports – The following tables summarize the effluent data reported on the Discharge Monitoring Reports (DMRs) for the previous permit term, from February 2006 through June 2012.

Table V-1 – Summary of DMR Data for Permitted Feature 001A

Parameter	*# Samples or Reporting Periods*	*Reported Average Concentrations Avg/Min/Max*	*Reported Maximum Concentrations Avg/Min/Max*	*Previous Avg/Max Permit Limit*	*Number of Limit Excursions*
Influent Flow (MGD)	*90*	*2.6/2.1/3.1*	*NA/NA/NA*	*Report/Report*	
Effluent Flow (MGD)	*88*	*2.4/2/3*	*2.8/2.2/6.4*	*4.5/NA*	
pH (su)	*90*	*7/6.5/7.5*	*7.4/6.9/8.1*	*6.5 - 9*	
E. coli (#/100 ml)	*77*	*5.8/1/137*	*15/1/242*	*126/252*	
TRC (mg/l)	*25*	*0.014/0/0.36*	*0.014/0/0.36*	*0.011/0.019*	
NH3 as N, Tot (mg/l) Jan	*6*	*0.83/0.1/2.7*	*3/0.22/9.8*	*6.2/36*	
NH3 as N, Tot (mg/l) Feb	*7*	*4.3/0.13/19*	*6.5/0.24/25*	*6.2/34*	
NH3 as N, Tot (mg/l) Mar	*7*	*4.9/0.075/22*	*7.9/0.15/28*	*5.8/35*	
NH3 as N, Tot (mg/l) Apr	*7*	*4.4/0.077/11*	*13/0.11/28*	*5.5/36*	
NH3 as N, Tot (mg/l) May	*7*	*1.4/0.12/4.4*	*4.6/0.84/13*	*4.5/30*	
NH3 as N, Tot (mg/l) Jun	*7*	*1.4/0.095/4.2*	*3.5/0.12/9*	*3.8/30*	
NH3 as N, Tot (mg/l) Jul	*6*	*0.5/0.08/1.2*	*2.3/0.11/8*	*3.4/28*	
NH3 as N, Tot (mg/l) Aug	*6*	*2.8/0.1/12*	*6.7/0.4/27*	*3.2/28*	
NH3 as N, Tot (mg/l) Sep	*6*	*2.9/0.08/13*	*6.3/0.13/25*	*3.4/33*	
NH3 as N, Tot (mg/l) Oct	*6*	*0.93/0.074/3*	*2.5/0.085/9.1*	*4.2/32*	
NH3 as N, Tot (mg/l) Nov	*6*	*0.43/0.068/1.1*	*1.9/0.1/5*	*5/33*	
NH3 as N, Tot (mg/l) Dec	*6*	*0.63/0.068/2.3*	*2.2/0.078/10*	*5.7/47*	
BOD5, influent (mg/l)	*89*	*274/161/420*	*NA/NA/NA*	*NA/NA*	
BOD5, influent (lbs/day)	*90*	*5696/2761/8068*	*NA/NA/NA*	*NA/NA*	
BOD5, effluent (mg/l)	*90*	*6/1.4/54*	*8.8/1.9/161*	*30/45*	*1*
BOD5 (% removal)	*89*	*98/84/100*	*NA/NA/NA*	*NA/NA*	*1*
TSS, influent (mg/l)	*89*	*348/226/596*	*395/246/760*	*NA/NA*	
TSS, effluent (mg/l)	*90*	*8.5/1.2/173*	*15/1.5/504*	*30/45*	*1*
TSS (% removal)	*89*	*98/64/100*	*NA/NA/NA*	*NA/NA*	*1*
Oil and Grease (mg/l)	*24*	*NA/NA/NA*	*0.42/0/10*	*NA/10*	
Cr, Dis (µg/l)	*41*	*0.41/0/10*	*0.49/0/10*	*NA/NA*	
Cr+3, Dis (µg/l)	*41*	*0.2/0/5*	*0.24/0/5*	*NA/NA*	
Cu, Dis (µg/l)	*77*	*5.2/0/27*	*5.2/0/27*	*28/47*	
CN, Free (µg/l)	*26*	*13/0/25*	*13/0/25*	*NA/NA*	
Fe, TR (µg/l)	*14*	*0.035/0/0.13*	*0.035/0/0.13*	*NA/NA*	
Mn, Dis (µg/l)	*14*	*0.033/0.018/0.05*	*0.034/0.018/0.05*	*NA/NA*	
Hg, Tot (µg/l)	*14*	*0.00036/0/0.005*	*0.0004/0/0.005*	*NA/NA*	

Se, Dis (µg/l)	*77*	*8.7/0/20*	*8.8/0/20*	*NA/NA*	
WET, chronic					
pimephales lethality, Stat Diff	*26*	*//*	*100/100/100*	*NA*	
pimephales lethality, IC25	*26*	*//*	*100/90/100*		
ceriodaphnia lethality, Stat Diff	*26*	*//*	*100/100/100*	*NA*	
ceriodaphnia lethality, IC25	*26*	*//*	*99/65/100*		
pimephales toxicity, Stat Diff	*26*	*//*	*95/25/100*	*Report*	
pimephales toxicity, IC25	*26*	*//*	*95/36/100*		
ceriodaphnia toxicity, Stat Diff	*26*	*//*	*97/13/100*	*Report*	
ceriodaphnia toxicity, IC25	*26*	*//*	*94/10/100*		

** Geometric mean
NA means Not Applicable
NV means No Visible Sheen

B. Compliance With Terms and Conditions of Previous Permit

1. Effluent Limitations – The data shown in the preceding table(s) indicates compliance with the numeric limitations of the previous permit. OR The data shown in the preceding table(s) indicate apparent violations of the permit. There was one time in 2007 where BOD5, BOD5 % Removal, TSS, and TSS % Removal were all exceeded. This appears to be a transient issue since no other problems were reported since then.

   In accordance with 40 CFR Part 122.41(a), any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee has been in compliance with all other aspects of the previous permit.

VI. DISCUSSION OF EFFLUENT LIMITATIONS

A. Regulatory Basis for Limitations

1. Technology Based Limitations

   a. Federal Effluent Limitation Guidelines – The Federal Effluent Limitation Guidelines for domestic wastewater treatment facilities are the secondary treatment standards. These standards have been adopted into, and are applied out of, Regulation 62, the Regulations for Effluent Limitations.

   b. Regulation 62: Regulations for Effluent Limitations – These Regulations include effluent limitations that apply to all discharges of wastewater to State waters and are shown in Section VIII of the WQA. These regulations are applicable to the discharge from the South Ft. Collins Sanitation District WWTF.

2. Numeric Water Quality Standards - The WQA contains the evaluation of pollutants limited by water quality standards. The mass balance equation shown in Section VI of the WQA was used for most pollutants to calculate the potential water quality based effluent limitations (WQBELs), M_2, that could be discharged without causing the water quality standard to be violated. For ammonia, the

AMMTOX Model was used to determine the maximum assimilative capacity of the receiving stream. A detailed discussion of the calculations for the maximum allowable concentrations for the relevant parameters of concern is provided in Section V of the Water Quality Assessment developed for this permitting action.

The maximum allowable effluent pollutant concentrations determined as part of these calculations represent the calculated effluent limits that would be protective of water quality. These are also known as the water quality-based effluent limits (WQBELs). Both acute and chronic WQBELs may be calculated based on acute and chronic standards, and these may be applied as daily maximum (acute) or 30-day average (chronic) limits.

3. Narrative Water Quality Standards - Section 31.11(1)(a)(iv) of The Basic Standards and Methodologies for Surface Waters (Regulation No. 31) includes the narrative standard that State surface waters shall be free of substances that are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life.

   a. Whole Effluent Toxicity - The Water Quality Control Division has established the use of WET testing as a method for identifying and controlling toxic discharges from wastewater treatment facilities. WET testing is being utilized as a means to ensure that there are no discharges of pollutants "in amounts, concentrations or combinations which are harmful to the beneficial uses or toxic to humans, animals, plants, or aquatic life" as required by Section 31.11 (1) of the Basic Standards and Methodologies for Surface Waters. The requirements for WET testing are being implemented in accordance with Division policy, Implementation of the Narrative Standard for Toxicity in Discharge Permits Using Whole Effluent Toxicity (Sept 30, 2010). Note that this policy has recently been updated and the permittee should refer to this document for additional information regarding WET.

4. Water Quality Regulations, Policies, and Guidance Documents

   a. Antidegradation - Since the receiving water is Use Protected an antidegradation review is not required pursuant to Section 31.8(2)(b) of The Basic Standards and Methodologies for Surface Water.

   b. Antibacksliding – As the receiving water is designated Use-Protected, the antibacksliding requirements in Regulation 61.10 have been met.

   c. Determination of Total Maximum Daily Loads (TMDLs) – This stream segment is not on the State's 303(d) list, and therefore TMDLs do not apply.

   d. Colorado Mixing Zone Regulations – Pursuant to section 31.10 of The Basic Standards and Methodologies for Surface Water, a mixing zone determination is required for this permitting action. The Colorado Mixing Zone Implementation Guidance, dated April 2002, identifies the process for determining the meaningful limit on the area impacted by a discharge to surface water where standards may be exceeded (i.e., regulatory mixing zone). This guidance document provides for certain exclusions from further analysis under the regulation, based on site-specific conditions.

      The guidance document provides a mandatory, stepwise decision-making process for determining if the permit limits will not be affected by this regulation. Exclusion, based on

Extreme Mixing Ratios, may be granted if the ratio of the facility design flow to the chronic low flow (30E3) is greater than 2:1(for stream discharges), or if the ratio of the chronic low flow to the design flow is greater than 20:1.

Since the discharge is to Fossil Creek Reservoir, and even though the 30E3 low flow was assumed to be zero, there is perennial water in the reservoir. If the permittee wishes to try justify more than a zero low flow dilution, they must submit a mixing zone study to the Division verify such dilution exists. However, it appears that the WWTF can meet the proposed limits without the use of extra dilution, so the completion of a mixing zone study is left to the permittee to choose to do or not.

e. Reasonable Potential Analysis – Using the assimilative capacities contained in the WQA, an analysis must be performed to determine whether to include the calculated assimilative capacities as WQBELs in the permit. This reasonable potential (RP) analysis is based on the Determination of the Requirement to Include Water Quality Standards-Based Limits in CDPS Permits Based on Reasonable Potential, dated December, 2002. This guidance document utilizes both quantitative and qualitative approaches to establish RP depending on the amount of available data.

A qualitative determination of RP may be made where ancillary and/or additional treatment technologies are employed to reduce the concentrations of certain pollutants. Because it may be anticipated that the limits for a parameter could not be met without treatment, and the treatment is not coincidental to the movement of water through the facility, limits may be included to assure that treatment is maintained.

A qualitative RP determination may also be made where a federal ELG exists for a parameter, and where the results of a quantitative analysis results in no RP. As the federal ELG is typically less stringent than a limitation based on the WQBELs, if the discharge was to contain concentrations at the ELG (above the WQBEL), the discharge may cause or contribute to an exceedance of a water quality standard.

To conduct a quantitative RP analysis, a minimum of 10 effluent data points from the previous 5 years, should be used. The equations set out in the guidance for normal and lognormal distribution, where applicable, are used to calculate the maximum estimated pollutant concentration (MEPC). For data sets with non-detect values, and where at least 30% of the data set was greater than the detection level, MDLWIN software is used consistent with Division guidance to generate the mean and standard deviation, which are then used to establish the multipliers used to calculate the MEPC. If the MDLWIN program cannot be used the Division's guidance prescribes the use of best professional judgment.

For some parameters, recent effluent data or an appropriate number of data points may not be available, or collected data may be in the wrong form (dissolved vs. total) and therefore may not be available for use in conducting an RP analysis. Thus, consistent with Division procedures, monitoring will be required to collect samples to support a RP analysis and subsequent decisions for a numeric limit. A compliance schedule may be added to the permit to require the request of an RP analysis once the appropriate data have been collected.

For other parameters, effluent data may be available to conduct a quantitative analysis, and therefore an RP analysis will be conducted to determine if there is RP for the effluent discharge to cause or contribute to exceedances of ambient water quality standards. The guidance specifies

that if the MEPC exceeds the maximum allowable pollutant concentration (MAPC), limits must be established and where the MEPC is greater than half the MAPC (but less than the MAPC), monitoring must be established. Table VI-1 contains the calculated MEPC compared to the corresponding MAPC, and the results of the reasonable potential evaluation, for those parameters that met the data requirements. The RP determination is discussed for each parameter in the text below.

Table VI-1 – Reasonable Potential Analysis

Pollutant	*Maximum of 30-Day Avg Effluent Conc. Or MEPC*	*30-Day Avg Proposed WQBEL*	*30-Day Avg RP*	*Maximum of Daily Max or 7-Day Avg Effluent Conc. Or MEPC*	*Daily Max or 7-Day Avg Proposed WQBEL*	*Daily Max RP*
Temp Daily Max (°C) April-Dec				NA	29.5	Monitor
Temp Daily Max (°C) Jan-March				NA	14.8	Monitor
Temp MWAT (°C) April-Dec	NA	26.3	Monitor			
Temp MWAT (°C) Jan-March	NA	13.2	Monitor			
E. coli (#/100 ml)	213	126	Yes	350	252	Yes
TRC (mg/l)	0	0.011	No	0	0.019	No
NH3 as N, Tot (mg/l) Jan	2.7	5.8	Qualitative	9.8	34	Qualitative
NH3 as N, Tot (mg/l) Feb	19	6.1	Yes	25	35	Qualitative
NH3 as N, Tot (mg/l) Mar	22	5.4	Yes	28	32	Qualitative
NH3 as N, Tot (mg/l) Apr	11	5.0	Yes	28	32	Qualitative
NH3 as N, Tot (mg/l) May	4.4	4.3	Yes	13	30	Qualitative
NH3 as N, Tot (mg/l) Jun	4.2	3.5	Yes	9.0	28	Qualitative
NH3 as N, Tot (mg/l) Jul	1.2	3.1	Qualitative	8.0	28	Qualitative
NH3 as N, Tot (mg/l) Aug	12	2.8	Yes	27	25	Yes
NH3 as N, Tot (mg/l) Sep	13	3.1	Yes	25	25	Yes
NH3 as N, Tot (mg/l) Oct	3.0	3.6	Qualitative	9.1	27	Qualitative
NH3 as N, Tot (mg/l) Nov	1.1	4.7	Qualitative	5.0	31	Qualitative
NH3 as N, Tot (mg/l) Dec	2.3	5.4	Qualitative	10	31	Qualitative
As, TR (µg/l)	NA	100	No*	NA	NA	NA
Cd, Dis (µg/l)	NA	1.2	Monitor	NA	8.8	Monitor
Cr+3, Dis (µg/l)	10	222	No	9.9	1704	No
Cr+6, Dis (µg/l)	NA	11	No	NA	16	No
Cu, Dis (µg/l)	53	28	Yes	53	47	Yes
CN, Free (µg/l)				31.6	5	Monitor
Fe, TR (µg/l)	156	1,000	No			
Pb, Dis (µg/l)	NA	10	Monitor	NA	267	Monitor
Mn, Dis (µg/l)	77	2,576	No	76	4,662	No
Hg, Tot (µg/l)	0.005	0.01	No			
Ni, Dis (µg/l)	NA	161	No*	NA	1,452	No*
Se, Dis (µg/l)	20	4.6	Monitor	20	18	Monitor
Ag, Dis (µg/l)	NA	3.2	Monitor	NA	20	Monitor
Zn, Dis (µg/l)	NA	389	No*	NA	448	No*
Nonylphenol (µg/l)	NA	6.6	Monitor	NA	28	Monitor

* - Based on analysis of total pretreatment data.

B. Parameter Evaluation

BOD_5 - The BOD_5 concentrations in Reg. 62 are the most stringent effluent limits and are therefore applied. The removal percentages for BOD_5 also apply based on the Regulations for Effluent Limitations. These limitations are the same as those contained in the previous permit and are imposed upon the effective date of this permit.

Total Suspended Solids - The TSS concentrations in Reg 62 are the most stringent effluent limits and are therefore applied. The removal percentages for TSS also apply based on the Regulations for Effluent Limitations. These limitations are the same as those contained in the previous permit and are imposed upon the effective date of this permit.

Oil and Grease –The oil and grease limitations from the Regulations for Effluent Limitations are applied as they are the most stringent limitations. This limitation is the same as those contained in the previous permit and is imposed upon the effective date of this permit.

pH - This parameter is limited by the water quality standards of 6.5-9.0 s.u., as this range is more stringent than other applicable standards. This limitation is the same as that contained in the previous permit and is imposed upon the effective date of this permit.

E. coli –The limitation for *E. coli* is based upon the WQBEL as described in the WQA. The RP analysis for *E. coli* was based upon the WQBELs as described in the WQA. With the available data the normal/log-normal/MDLWIN program was used to determine the appropriate statistics to determine the MEPC. The MEPC was greater than the MAPC and therefore limitations are required. Therefore a, 30-day maximum and 7-day maximum requirement has been added to the permit. Previous monitoring as shown in Table V-1 indicate that this limitation can be met and is therefore imposed upon the effective date of the permit.

Total Residual Chlorine (TRC) - A qualitative determination of RP has been made as chlorine may be used in the treatment process. Previous monitoring as shown in Table V-1 indicate that this limitation can be met and is therefore imposed upon the effective date of the permit.

Ammonia - The monthly limitations for ammonia are based upon the WQBELs as described in the WQA. A qualitative determination of RP has been made as the treatment facility has been designed to treat specifically for this parameter. While this limitation is more stringent than the previous limit, the permittee should still be able to meet this limit based on the most recent years of DMRs.

Total Recoverable Arsenic – There is only pretreatment data available regarding the presence/absence or quantification of this parameter in the discharge. Since the data shows all less than detects, with a detection level well below the potential effluent limit, the Division made a qualitative determination that arsenic levels are so low no effluent limitations or monitoring are necessary at this time.

Total Recoverable Cadmium – There is only pretreatment data available regarding the presence/absence or quantification of this parameter in the discharge. This data was all less than detection level. However, since the detection level was above the potential effluent limit, the Division made a qualitative determination that the potential exists for this parameter to be present at levels that could exceed potential effluent limits. Therefore a monitoring requirement, at a detection level required in the permit, low enough to show numeric attainment of potential effluent limits, has been added to the permit.

Potentially Dissolved Trivalent Chromium – The RP analysis for Chromium III was based upon the WQBEL as calculated in the WQA. With the available data the normal/log-normal program was used to determine the appropriate statistics to determine the MEPC. The MEPC was less than half of the MAPC and therefore limitations or monitoring are not necessary at this time.

Dissolved Hexavalent Chromium – There is data available with the appropriate detection limit regarding the presence/absence or quantification of this parameter in the discharge even though this detection limits is higher than half of the standard. The Division made a qualitative determination that since the Chromium III levels are also so low no limitations or monitoring are not necessary at this time.

Total Recoverable Copper – The limitation for copper is based upon the WQBEL as described in the WQA. The RP analysis for Copper was based upon the WQBELs as described in the WQA. With the available data the normal/log-normal/MDLWIN program was used to determine the appropriate statistics to determine the MEPC. The MEPC was greater than the MAPC and therefore limitations are required. Therefore a, 30-day maximum and 1-day maximum requirement has been added to the permit. Previous monitoring as shown in Table V-1 indicate that this limitation can be met and is therefore imposed upon the effective date of the permit.

Cyanide – There is effluent data available regarding the presence/absence or quantification of this parameter in the discharge. This data was all less than detection level. However, since the detection level was above the potential effluent limit, the Division made a qualitative determination the potential exists for this parameter to be present at levels that could exceed potential effluent limits. Therefore a monitoring requirement, at a detection level required in the permit, low enough to show numeric attainment of potential effluent limits, has been added to the permit.

Total Recoverable Iron – The RP analysis for Iron was based upon the WQBEL as calculated in the WQA. With the available data the normal/log-normal program was used to determine the appropriate statistics to determine the MEPC. The MEPC was less than half of the MAPC and therefore limitations are not necessary at this time.

Total Recoverable Lead – There is only pretreatment data available regarding the presence/absence or quantification of this parameter in the discharge. This data was mostly less than detection level, except for one sample higher than the proposed effluent limit. Since there was one sample above the limit, and the detection level was at the potential effluent limit, the Division made a qualitative determination that the potential exists for this parameter to be present at levels that could exceed potential effluent limits. Therefore a monitoring requirement, at a detection level required in the permit, low enough to show numeric attainment of potential effluent limits, has been added to the permit.

Potentially Dissolved Manganese – The RP analysis for manganese was based upon the WQBEL as calculated in the WQA. With the available data the normal/log-normal program was used to determine the appropriate statistics to determine the MEPC. The MEPC was less than half of the MAPC and therefore limitations are not necessary at this time.

Total Mercury – The RP analysis for mercury was based upon the WQBEL as calculated in the WQA. With the available data the normal/log-normal program was used to determine the appropriate statistics to determine the MEPC. The MEPC was less than half of the MAPC and therefore limitations are not necessary at this time.

Potentially Dissolved Nickel – There is only pretreatment data available regarding the presence/absence

or quantification of this parameter in the discharge. Since the data shows all less than detects, with a detection level well below the potential effluent limit, the Division made a qualitative determination that nickel levels are so low no effluent limitations or monitoring are necessary at this time.

Total Recoverable Selenium – There is no data available with the appropriate detection limit regarding the presence/absence or quantification of this parameter in the discharge. Since the potential exists for this parameter to be present, monitoring has been added to the permit.

Total Recoverable Silver – There is only pretreatment data available regarding the presence/absence or quantification of this parameter in the discharge. This data was all less than detection level. However, since the detection level was above the potential effluent limit, the Division made a qualitative determination that the potential exists for this parameter to be present at levels that could exceed potential effluent limits. Therefore a monitoring requirement, at a detection level required in the permit, low enough to show numeric attainment of potential effluent limits, has been added to the permit.

Total Recoverable Dissolved Zinc – There is only pretreatment data available regarding the presence/absence or quantification of this parameter in the discharge. This data was above detection level. Since there was one sample above one half of the WQBEL, the Division made a qualitative determination that the potential exists for this parameter to be present at levels that would at least require monitoring of the effluent. Therefore a monitoring requirement, at a detection level required in the permit, low enough to show numeric attainment of potential effluent limits, has been added to the permit.

Temperature - The MWAT is the maximum weekly average temperature, as determined by a seven day rolling average, using at least 3 equally spaced temperature readings in a 24-hour day (at least every 8 hours for a total of at least 21 data points).

The daily maximum is defined as the maximum 2 hour average, with a minimum of 12 equally spaced measurements throughout the day. As both of these temperature requirements will likely require the use of automated temperature measurements and recordings, the permittee is given until May 1, 2013, to have the proper equipment in place to take the required readings.

As it is unknown whether the facility can meet the new temperature limitation, or whether there is reasonable potential for the facility to cause or contribute to an exceedance of the water quality standard for temperature, report only conditions will be required for the duration of this permit. Upon the next permit renewal, the collected temperature data will be used to determine if there is reasonable potential, and/or if the permittee can meet the limitation.

As continuous ambient water quality data, in accordance with the definition of the standard, is not available, the permittee is encouraged to collect instream data on a continuous basis. This data may be used during the next permit renewal, so that the assimilative capacity of the receiving water (if applicable) can be calculated and used to determine a limitation based on the streams dilution potential. If such data is not available, the Division will likely set the limitation at the water quality standard (i.e. end of pipe limit, no dilution).

Other Limitations:

Organics – The effluent is not expected or known to contain many organic chemicals, and therefore, limitations for organic chemicals are not needed in this permit except as noted below.

Nonylphenol – There is only pretreatment data available regarding the presence/absence or quantification of this parameter in the discharge. This data was for total phenols, and was mostly less than detection level, except for one sample higher than the proposed effluent limit. Since there was one sample above the limit, and the detection level was above the potential effluent limit, the Division made a qualitative determination that the potential exists for this parameter to be present at levels that could exceed potential effluent limits. Therefore a monitoring requirement, at a detection level required in the permit, low enough to show numeric attainment of potential effluent limits, has been added to the permit and the Division's default PQL will apply.

1. In-Stream Waste Concentration (IWC) – Where monitoring or limitations for WET are deemed appropriate by the Division, the chronic in-stream dilution is critical in determining whether acute or chronic conditions shall apply. In accordance with Division policy, for those discharges where the chronic IWC is greater than 9.1% and the receiving stream has a Class 1 Aquatic Life use or Class 2 Aquatic Life use with all of the appropriate aquatic life numeric standards, chronic conditions will normally apply. Where the chronic IWC is less than or equal to 9.1, or the stream is not classified as described above, acute conditions will normally apply. The chronic IWC is determined using the following equation:

   IWC = [Facility Flow (FF)/(Stream Chronic Low Flow (annual) + FF)] X 100%

   The flows and corresponding IWC for the appropriate discharge point are:

Permitted Feature	Chronic Low Flow, 30E3 (cfs)	Facility Design Flow (cfs)	IWC, (%)
001A	0	7	100

   The IWC for this permit is 100 %, which represents a wastewater concentration of 100 % effluent to 0 % receiving stream.

2. General Information – The permittee should read the WET testing section of Part I of the permit carefully, as this information has been updated in accordance with the Division's updated policy, Implementation of the Narrative Standard for Toxicity in Discharge Permits Using Whole Effluent Toxicity (Sept 30, 2010) . The permit outlines the test requirements and the required follow-up actions the permittee must take to resolve a toxicity incident. The permittee should also read the above mentioned policy which is available on the Permit Section website. The permittee should be aware that some of the conditions outlined above may be subject to change if the facility experiences a change in discharge, as outlined in Part II.A.2. of the permit. Such changes shall be reported to the Division immediately.

C. Parameter Speciation

Total Recoverable vs. Potentially Dissolved
To prevent sample duplication for pretreatment sampling, the South Ft. Collins SD has asked the Division, as allowed in 61.8(2)(b)(vii), to change the analysis fraction of all metals from the potential dissolved fraction to the total recoverable form. This was done for all metals with monitoring requirements in this permit.

Total / Total Recoverable Arsenic
For total recoverable arsenic, the analysis may be performed using a graphite furnace, however, this method may produce erroneous results and may not be available to the permittee. Therefore, the total method of analysis will be specified instead of the total recoverable method.

Cyanide
For cyanide, the acute standard is in the form of "free" cyanide concentrations. However, there is no analytical procedure for measuring the concentration of free cyanide in a complex effluent. Therefore, ASTM (American Society for Testing and Materials) analytical procedure D2036-81, Method C, will be used to measure weak acid dissociable cyanide in the effluent. This analytical procedure will detect free cyanide plus those forms of complex cyanide that are most readily converted to free cyanide.

VII. ADDITIONAL TERMS AND CONDITIONS

A. Monitoring

Effluent Monitoring – Effluent monitoring will be required as shown in the permit document. Refer to the permit for locations of monitoring points. Monitoring requirements have been established in accordance with the frequencies and sample types set forth in the Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Industrial and Domestic Wastewater Treatment Facilities. This policy includes the methods for reduced monitoring frequencies based upon facility compliance as well as for considerations given in exchange for instream monitoring programs initiated by the permittee. Table VI-2 shows the results of the reduced monitoring frequency analysis for Permitted Feature 001A, Limit Set South Ft. Collins Sanitation District, based upon compliance with the previous permit.

Table VI-2 – Monitoring Reduction Evaluation

Parameter	***Proposed Permit Limit***	***Average of 30-Day (or Daily Max) Average Conc.***	***Standard Deviation***	***Long Term Characterization (LTC)***	***Reduction Potential***
pH (su) Minimum	*min 6.5*	*7.1*	*0.12*	*6.86*	*1 Step*
pH (su) Maximum	*max 9.0*	*7.5*	*0.12*	*7.74*	

B. Reporting

1. Discharge Monitoring Report – The South Ft. Collins Sanitation District facility must submit Discharge Monitoring Reports (DMRs) on a monthly basis to the Division. These reports should contain the required summarization of the test results for all parameters and monitoring frequencies shown in Part I.B of the permit. See the permit, Part I.B, C, D and/or E for details on such submission.

2. Special Reports – Special reports are required in the event of an upset, bypass, or other noncompliance. Please refer to Part II.A. of the permit for reporting requirements. As above, submittal of these reports to the US Environmental Protection Agency Region VIII is no longer required.

C. **Signatory and Certification Requirements**
Signatory and certification requirements for reports and submittals are discussed in Part I.E.6. of the permit.

D. Compliance Schedules
The following compliance schedules are included in the permit. See Part I.B of the permit for more information.

Install Temperature Monitoring equipment, within 6 months of effective date of permit.

All information and written reports required by the following compliance schedules should be directed to the Permits Section for final review unless otherwise stated.

E. Economic Reasonableness Evaluation
Section 25-8-503(8) of the revised (June 1985) Colorado Water Quality Control Act required the Division to "determine whether or not any or all of the water quality standard based effluent limitations are reasonably related to the economic, environmental, public health and energy impacts to the public and affected persons, and are in furtherance of the policies set forth in sections 25-8-192 and 25-8-104."

The Colorado Discharge Permit System Regulations, Regulation No. 61, further define this requirement under 61.11 and state: "Where economic, environmental, public health and energy impacts to the public and affected persons have been considered in the classifications and standards setting process, permits written to meet the standards may be presumed to have taken into consideration economic factors unless:

a. A new permit is issued where the discharge was not in existence at the time of the classification and standards rulemaking, or

b. In the case of a continuing discharge, additional information or factors have emerged that were not anticipated or considered at the time of the classification and standards rulemaking."

The evaluation for this permit shows that the Water Quality Control Commission, during their proceedings to adopt the Classifications and Numeric Standards for South Platte River Basin, Laramie River Basin, Republican River Basin, Smoky Hill River Basin, considered economic reasonableness.

Furthermore, this is not a new discharger and no new information has been presented regarding the classifications and standards. Therefore, the water quality standard-based effluent limitations of this permit are determined to be reasonably related to the economic, environmental, public health and energy impacts to the public and affected persons and are in furtherance of the policies set forth in Sections 25-8-102 and 104. If the permittee disagrees with this finding, pursuant to 61.11(b)(ii) of the Colorado Discharge Permit System Regulations, the permittee should submit all pertinent information to the Division during the public notice period.

Eric Oppelt
9/5/2012

VIII. REFERENCES

A. Colorado Department of Public Health and Environment, Water Quality Control Division Files, for Permit Number CO0020737.

B. "Design Criteria Considered in the Review of Wastewater Treatment Facilities", Policy 96-1, Colorado Department of Public Health and Environment, Water Quality Control Commission, April 2007.

C. Basic Standards and Methodologies for Surface Water, Regulation No. 31, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective January 1, 2012.

D. Classifications and Numeric Standards for South Platte River Basin, Laramie River Basin, Republican River Basin, Smoky Hill River Basin, Regulation No. 38, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective June, 2009.

E. Colorado Discharge Permit System Regulations, Regulation No. 61, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective January 30, 2012.

F. Regulations for Effluent Limitations, Regulation No. 62, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective July 30, 2012.

G. Pretreatment Regulations, Regulation No. 63, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective April 01, 2007.

H. Biosolids Regulation, Regulation No. 64, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective March 30, 2010.

I. Colorado River Salinity Standards, Regulation No. 39, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective August 30, 1997.

J. Section 303(d) List of Water Quality Limited Segments Requiring TMDLs, Regulation No 93, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective March 30, 2012.

K. Antidegradation Significance Determination for New or Increased Water Quality Impacts, Procedural Guidance, Colorado Department of Public Health and Environment, Water Quality Control Division, effective December 2001.

L. Determination of the Requirement to Include Water Quality Standards-Based Limits in CDPS Permits Based on Reasonable Potential, Colorado Department of Public Health and Environment, Water Quality Control Division, effective December2002.

M. The Colorado Mixing Zone Implementation Guidance, Colorado Department of Public Health and Environment, Water Quality Control Division, effective April 2002.

N. Baseline Monitoring Frequency, Sample Type, and Reduced Monitoring Frequency Policy for Domestic and Industrial Wastewater Treatment Facilities, Water Quality Control Division Policy WQP-20, May 1, 2007.

O. Implementing Narrative Standards in Discharge Permits for the Protection of Irrigated Crops, Water Quality Control Division Policy WQP-24, March 10, 2008.

P. Implementing Narrative Standard for Toxicity in Discharge Permits Using Whole Effluent Toxicity (WET) Testing. Colorado Department of Public Health and Environment, Water Quality Control Division Policy Permits-1, September 30, 2010.

Q. Policy for Conducting Assessments for Implementation of Temperature Standards in Discharge Permits, Colorado Department of Public Health and Environment, Water Quality Control Division, Policy Number WQP-23, effective July 3, 2008.

R. Policy for Permit Compliance Schedules, Colorado Department Public Health and Environment, Water Quality Control Division Policy Number WQP-30, effective December 2, 2010.

S. Procedural Regulations for Site Applications for Domestic Wastewater Treatment Works, Regulation No. 22, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective September 30, 2009.

T. Regulation Controlling discharges to Storm Sewers, Regulation No. 65, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective May 30, 2008.

U. Water and Wastewater Facility Operator Certification Requirements, Regulation No. 100, Colorado Department of Public Health and Environment, Water Quality Control Commission, effective September 30, 2007.

Eric Oppelt
9/5/2012

VIII. PUBLIC NOTICE COMMENTS

The public notice period was from September 14 to October 14, 2012. Comments were received from South Fort Collins Sanitation District. The comments and the response of the Division are given below.

Comment 1 - Part I (A)(2) Metals (permit, Page 3/37) Metals concentrations measured in compliance with the effluent monitoring requirements listed in Part I.A of this permit may be used to satisfy any pretreatment or industrial waste management metals monitoring requirements listed in Part I.B.8, if the metals are in the same form (i.e. total).

Part I.A references metal as potentially dissolved. This is in contradiction to the EPA requirement that testing be performed according to 40 CFR 122 Appendix D Table III, which require total metals testing. The District is requesting that this paragraph be removed to resolve potential conflicts between EPA and CDPHE requirements.

Division Response 1 – It is correct that effluent data collected for pretreatment monitoring can be used to satisfy some permit monitoring requirements. The potentially dissolved fraction of metals is though the common form that may be required in CDPS permit effluent limitations, and does not conflict with separate monitoring that would be done for pretreatment. However, based on 61.8(2)(b)(vii) the District may request from the Division to use total recoverable analysis in lieu of potentially dissolved. Therefore based on this first comment and

follow up phone discussions with the District, the Division will require total recoverable metals analysis for this permit where possible. This will be noted in Part VI(B) and Part VI(C) of the Fact Sheet, and the effluent limitation table in Part 1(A)(2) of the permit.

Comment 2 - (permit, Page 4/37) Referring to ICIS Code 00978 (As, TR (ug/l), located in the table on page 4/37 of the permit; please refer to Part VI(C) Parameter Specification (page 12 of the rationale) Total Recoverable Arsenic - which method should be used for determining As, TR? This paragraph is unclear. Is the total method of analysis or the total recoverable method preferred?

Division Response 2 – The EPA and the Division view the results of total and total recoverable analysis as the same. Typically the Division assigns total recoverable analysis to effluent limits protecting a total recoverable fraction stream standard, total analysis to effluent limits protecting total stream standards, and potentially dissolved analysis to effluent limits protecting dissolved fraction stream standards.

Comment 3 - (permit Rationale, Page 11) Other Limitations Organics - The District is requesting that the organics paragraph be removed. While the paragraph does acknowledge that the effluent is not expected to or known to contain many organic chemicals, and limits are not needed for this permit, this paragraph does address the issue of nonylphenols.

Nonylphenol -Nonylphenol is being added to the permit as a parameter requiring monitoring. The District is required to monitor for total phenols per the CDPS permit. Nonyphenol is a semivolatile organic compound, and a subset of phenols, which is already monitored as a 40 CFR 122 Appendix D Table III parameter on a semi-annual basis. Is the District required to sample and test for this phenol separately? The District is requesting that the nonyphenol paragraph be removed. Nonylphenols are used in the application of industrial surfactants in detergents and as a wetting agent in some pesticides. The District has a comprehensive plan for identifying industrial users and the District has not identified any industrial users of nonylphenols. The District budgets for the testing of phenols on a semi-annual basis and separate testing for nonylphenols is a duplication of effort.

Division Response 3 – This is a new standard for the waters of the state, and has been placed as a numeric standard on streams separate of the other organics in the Basic Standards. This was done in part for segments because of the potential for normal domestic WWTFs to have nonylphenol in their effluent. The Division did review the total phenol data the District reported as part of their pretreatment data monitoring, but the detection limit for total phenol was above the chronic 6.8 ug/l standard, and not affirmative of protective nonylphenol levels in the effluent. There is now an approved 40 CFR nonylphenol analysis method, and the PQL table in the permit at Part I (D)(5), and text about nonylphenol with this table, has been updated to more accurately show this. Because this method is available there is no need to delay implementing the monitoring for this parameter and this is now shown in the effluent limitations table in Part I (A)(2). A monitoring requirement for nonylphenol monitoring will be kept in the permit, but the reporting frequency has been reduced to quarterly in the effluent limitations table in Part I (A)(2) to reflect the most common Division monitoring practice.

Comment 4 - Part 1(B)(7)(c) (permit, Page 11/37) paragraph 2 In accordance with 40CFR 122.44G)(2)(ii), the permittee shall submit to the Division and Approval Authority a technical evaluation of the need to revise or develop local limits in accordance with 40CFR 403.5c, by [12 MONTHS FROM EFFECTIVE DATE].

The evaluation shall include. but not be limited to. a consideration of any new or revised numeric and practice-based effluent limits in this permit. If a technical evaluation reveals that development or revision of local limits is necessary. the permittee shall submit a program modification with the proposed revised local limits to the

Division and Approval Authority in the applicable form by 124 MONTHS FROM EFFECTIVE DATEI. and implement the new local limits within 12 months of approval by the Approval Authority.

The Industrial Wastewater Pretreatment program is audited by EPA through the use of the Pretreatment Audit and the Pretreatment Compliance Inspection (PCI). The above paragraph places fixed deadlines on local limits development, deadlines and is in conflict with EPA guidance, per Al Garcia. The District is requesting that the italicized sentences be removed.

Division Response 4 – The Division agrees to remove the last sentence of, and modify the paragraph that causes the conflict. This was done to the second paragraph of Part1(B)(7)(c) of the permit.

Comment 5 - Part 1(B)(7)(d) (permit, Page 11/37) Under Part I(B)(7)(d) of the Industrial Waste Management section of the new permit, Table II testing is required twice per year and Table III testing is required every two years (1/2years) for influent and effluent streams. In the existing permit, Table II testing is required in the 2nd and 4th year of the permit and Table III testing is required twice per year. Table III contains metals, CN, and phenols and Table II contains organics. Per Al Garcia, EPA Region 8 Pretreatment Coordinator, POTW's with design flows less than 5 MGD are required to sample influent and effluent flows for Table III parameters semi-annually and Table II parameters in the 2nd and 4th year of the permit. The design flow for the District treatment facility is 4.5 MGD. Therefore, the analysis criteria for the District should not be changed.

Division Response 5 – The Division agrees to change the monitoring frequency to what is normally required for a WWTF with a design flow <5 MGD. These changes were made to Part 1(B)(7)(d) of the permit.

Comment 6 - Part 1(B)(7)(i) (permit, Page 13/37) The Permittee must notify the Water Quality Control Division and Approval Authority of any new introductions by new or existing industrial users or any substantial change in pollutants from any industrial user within sixty (60) calendar days following the introduction or change, as required in 40 CFR 122.42(b)(1-3). The District requests the term "industrial user" is replaced with "significant industrial user".

Division Response 6 – The Division agrees to change “industrial user” to “significant industrial user” in the appropriate areas in Part 1(B)(7)(i) of the permit. These changes were made to Part 1(B)(7)(i) of the permit.

Comment 7 - Part VI(B)(Permit Rationale, Pages 7-12) A reasonable potential (RP) analysis for the following parameters is requested because in Part VI(B), pages 9 and 10 of the rationale, it is stated that "there is no data available regarding the presence/absence or quantification of this parameter in the discharge. Since the potential exists for these parameters to be present, monitoring for the following parameters has been added to this permit." The following parameters are:

- Arsenic
- Cadmium
- Cyanide
- Lead
- Nickel
- Silver
- Zinc
- Phenols

Each of these parameters is listed in 40CFR Part 122 Appendix D Table III and therefore, under Part 1(A)(7)(c) of the existing permit, these parameters are sampled in the influent stream and the effluent stream twice per year per EPA requirements. Per Part 1(A)(7)(f) of the existing permit, this data is submitted yearly to EPA in the pretreatment annual report, along with a copy of the annual report which is submitted to the Water Quality Control Division of the CDPHE.

POTW influent and effluent sampling data for the parameters listed above is available upon request.

Table III of the permit requires an analysis for total metals, total cyanide, and total phenols. An RP analysis requires the measuring of potentially dissolved metals. Potentially dissolved metals are a subset of total metals. A total metals result for any parameter will be equal to or higher than the potentially dissolved result for the same sample. Can the total metal result be substituted for the potentially dissolved metal result?

Cyanide is being added to the permit. Cyanide is included in the existing permit, Part 1(B)(2) page 10, as a parameter which is currently being measured on a quarterly basis. Will this frequency remain the same or be changed? Testing method SM 4500 CN C E has been used to test cyanide on a quarterly basis. Part I (VI)(C) of the rationale indicates that method D2036-81 Method C should be used. Is D2036-81 a 40 CFR Part 136 EPA approved test method? Which method should the District be using?

Division Response 7 – The Division did not use the pretreatment data, as it could have, in the first RP analysis of this permit. This data is not available in the EPA ICIS data base and needs to be physically read from hard copy and then evaluated. While this analysis data is in total form, it can be used to make some qualitative decisions about RP.

For arsenic (As), the pretreatment data shows effluent levels that are less than the detection level (DL) of 5 µg/l. While this DL is higher than that suggested in the permit at Part I(5)(D), it is still far enough below the lowest As (Trec) effluent limit of 100 µg/l to show compliance. Therefore the Division decides there is no numerical reasonable potential for exceedances of the As limit and this will be noted in Table VI-1 and Part VI(B) of the Fact Sheet, and the effluent limitation table in Part I(A)(2) of the permit.

For cadmium (Cd), the pretreatment data shows effluent levels that are less than the detection level (DL) of 5 µg/l. However, this DL does not show compliance with the lowest Cd (PD) effluent limit of 1.2 µg/l. Therefore the Division decides there is still reasonable potential for exceedances of the Cd limit and this will be noted in Table VI-1 and Part VI(B) of the Fact Sheet. A lower detection level like that shown in the table at Part I(D)(5) of the permit will be necessary to show compliance with the permit limit.

For cyanide (CN), the DMR data shows effluent levels that are less than the detection levels (DL) of 25, 20, and one at 10 µg/l. While the one analysis at a DL of 10 mg/l gives some adequate information, the others do not meet the PQL required in the permit in the Permit a Part I(D)(5). Therefore the Division decides there is still reasonable potential for exceedances of the CN limit and this will be noted in Table VI-1 and Part VI(B) of the Fact Sheet. The monitoring frequency will be maintained at quarterly, instead of monthly, as requested the District. Analytical procedure D2036-81, Method C, will be used to measure weak acid dissociable cyanide in the effluent. This analytical procedure will detect free cyanide plus those forms of complex cyanide that are most readily converted to free cyanide.

For lead (Pb), the pretreatment data shows effluent levels that are at the detection level (DL) of 10 µg/l, and one sample that was at 28 µg/l. This DL does not show levels low enough to confidently say there is no RP for a monitoring requirement, and one sample was also above the lowest Pb effluent limit of 10 µg/l.

Therefore the Division decides there is still reasonable potential for exceedances of the Pb limit and this will be noted in Table VI-1 and Part VI(B) of the Fact Sheet. A lower detection level like that shown in the table at Part I(D)(5) of the permit will be necessary to show compliance with the permit limit.

For nickel (Ni), the pretreatment data shows effluent levels that are less than the detection level (DL) of 10 µg/l. While this DL is higher than that suggested in the permit at Part I(5)(D), it is still far enough below the lowest Ni (PD) effluent limit of 161 µg/l to show compliance. Therefore the Division decides there is no numerical reasonable potential for exceedances of the Ni limit and this will be noted in Table VI-1 and Part VI(B) of the Fact Sheet, and the effluent limitation table in Part 1(A)(2) of the permit.

For silver (Ag), the pretreatment data shows effluent levels that are less than the detection level (DL) of 10 µg/l. However, this DL does not show compliance with the lowest Ag (PD) effluent limit of 3.2 µg/l. Therefore the Division decides there is still reasonable potential for exceedances of the Ag limit and this will be noted in Table VI-1 and Part VI(B) of the Fact Sheet. A lower detection level like that shown in the table at Part I(D)(5) of the permit will be necessary to show compliance with the permit limit.

For zinc (Zn), the pretreatment data shows effluent levels that are above the detection level (DL) of 5 µg/l, and one sample that was at 199 µg/l. While this DL is higher than that suggested in the permit at Part I(5)(D), it is still far enough below the lowest Zn effluent limit of 389 µg/l to show compliance.. Therefore the Division decides there is no numerical reasonable potential for exceedances of the Zn limit and this will be noted in Table VI-1 and Part VI(B) of the Fact Sheet, and the effluent limitation table in Part I(A)(2) of the permit.

For phenols, the pretreatment data for total phenols shows effluent levels that are less than the detection level (DL) of 10 µg/l, however one sample was at 40 µg/l. Therefore the Division decides there is still reasonable potential for exceedances of the nonylphenol limit and this will be noted in Table VI-1 and Part VI(B) of the Fact Sheet.

Comment 8 - Part 1(B)(7) (permit, Page 9/37) The heading for section 7 is Industrial Waste Management. This heading should be changed to Industrial Pretreatment Program - Contributing Industries and Pretreatment Requirements.

Division Response 8 – The Division agrees to change the title of the Pretreatment Section of the permit to "Pretreatment Program – Industrial Waste Management". This was done to the title of Part 1(B)(7) of the permit.